

## Endospore formation of candida orthopsilosis and cellular morphology differentiation using staining method of dorner with snyder's modification

### Abstract :

Candida orthopsilosis is a relatively new species proposed in 2005 to replace *C. parapsilosis* group II. The yeast has been increasingly isolated from human body parts with great significance in virulence. In this study, we aimed to investigate the possibility of pathogenic *C. orthopsilosis* isolate AY2 in forming endospore after prolonged growth and to differentiate the different cellular morphology of the yeast by Dorner's staining method with Snyder's modification. Malachite staining was carried out to verify formation of endospores. The results showed that the yeast existed in typical yeast-like cell, blastospores and pseudohyphae forms. Blastospores and endospores were present in the culture grown in a sporulation medium containing 10 g l<sup>-1</sup> of potassium acetate. Prolonged incubation of the yeasts in the medium resulted on formation of pseudohyphae and endospores. Dorner's staining method with Snyder's modification differentiated the presence of blastospores from vegetative yeast cells and pseudohyphae. To date, this is the first report to show the presence of endospores in *C. orthopsilosis*, as well as the use of Dorner's method with Snyder's modification to stain the yeast cells of different morphologies.